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# **SDSRV Design Status**

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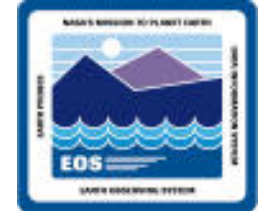
**18 April 1996**

# Agenda



- **Release B Capabilities**
- **Software CSCs**
- **Software CSC Status**
- **Progress Since IDR-B**
- **ESDT Design**
- **Design Trades**
- **Sybase/Illustra Benchmark Status**
- **High Level HW/SW Physical Design**
- **Detailed HW/SW Architecture**
- **Transition Topics**
- **Next Steps**
- **Design Topics**

# Release B Capabilities

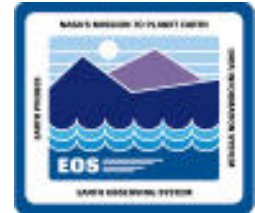


## ESDT-Related Work

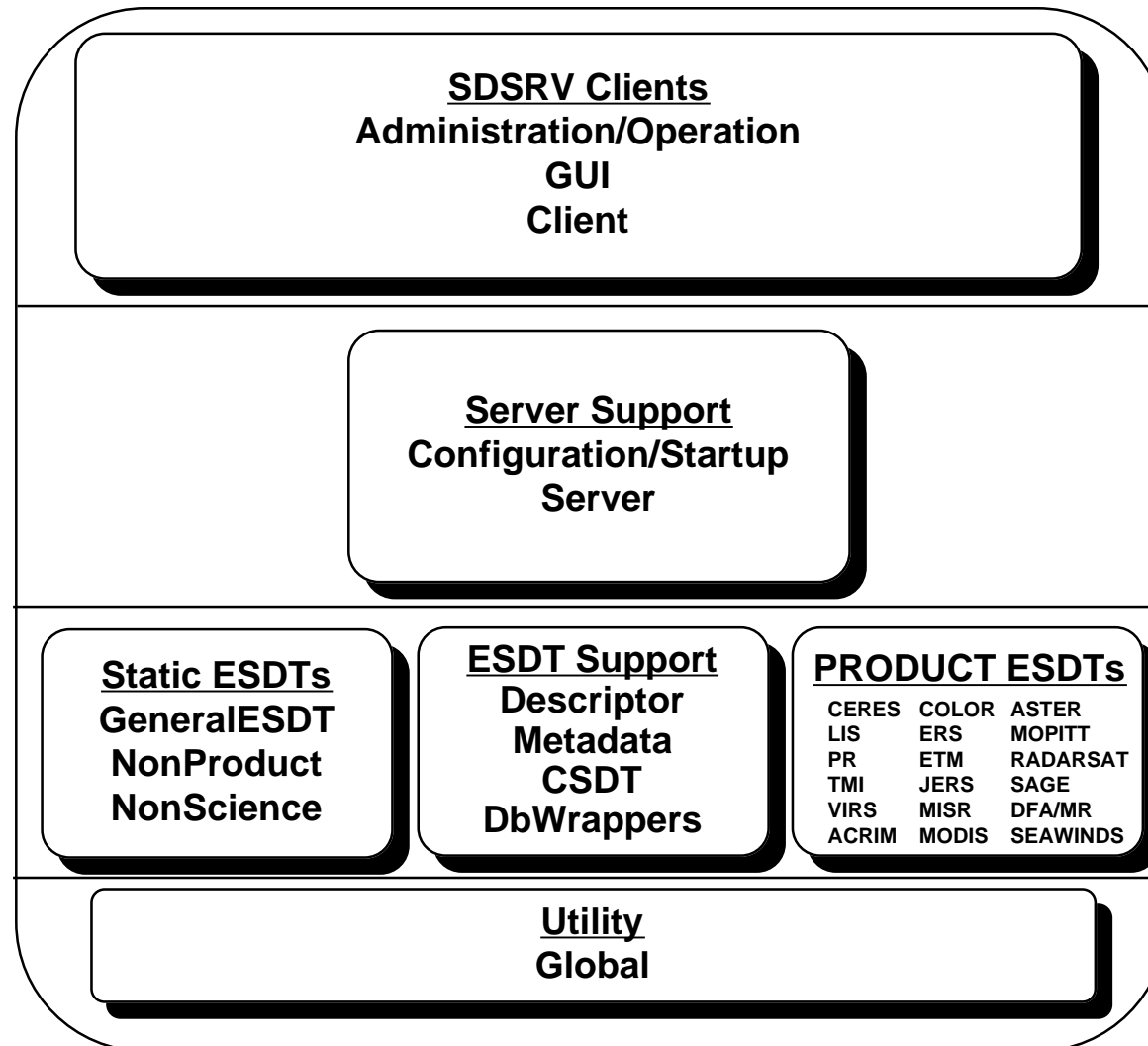
- **Multiple Command Request**
- **New ESDTs - 115 (Total of 173)**
- **On-demand Processing**
- **Subsetting**

## SDSRV Internal Infrastructure

- **Suspend and Resume Sessions**
- **Accounting**
- **Metadata Problem Reports**
- **ASTER DAR Support**
- **ESQL Support**
- **Migration from Sybase to Illustra**



# Software CSCs



# Software CSC Status



## SDSRV Internal Infrastructure CSCs

CSC	Abbrev.	"A" Unaffected	Augmented From "A"	Exclusively for "B"
Administration/Op	Ad		Low	
Client	Cl		8 New Attributes, 31 New Operations	
Configuration/Startup	Cn	X		
Metadata	Md		9 New Operations	
CSDT	Cs		1 New Class, 21 New Operations	
DB Wrappers	Db		High	
Descriptors	De		1 New Operation	
General ESDT	Ge		1 New Attribute, 5 New Operations	
Global	Gl		Low	
GUI	Gu		Low	
Server	Sr		10 New Classes, 6 New Attributes, 38 New Operations	

# Software CSC Status (cont.)



## ESDT Data Type CSCs

CSC	Abbrev.	"A" Unaffected	Augmented From "A"	Exclusively for "B"
CERES	Ce		Low	
LIS	Li		Low	
ESDTs	Np		Low	
Non-Science ESDTs	Ns		2 New Classes	
PR	P r		Low	
TMI	Tm		Low	
VIRS	Vi		Low	
ACRIM	Ac			1 New Class
ASTER	As			1 New Class
COLOR	Co			1 New Class
ERS	E r			1 New Class
ETM	Et			1 New Class
JERS	Je			1 New Class
MISR	M i			1 New Class
MODIS	Mo			1 New Class
MOPITT	Mp			1 New Class
RADARSAT	Ra			1 New Class
SAGE	Sa			1 New Class
SSA	Ss			1 New Class
SeaWinds	Sw			1 New Class

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# Progress Since IDR-B



## Overall SDSRV Progress:

- Closed all IDR-B RIDS
- Held RID #5 Meeting - 2/96
- Supported Infrastructure Implementation Feasibility Workshop - 2/96
- Supported OPS Workshop - 2/96
- Held ESDIS/DAAC Issue Resolution Mtg - 2/96
- Held ESDIS TIM - 2/96
- Worked with Rel A to minimize design breakage for Rel B
- Refined technical concept of operations for key design areas
- Provided input to User Modeling effort

## Completed Input to CDR-B DID 313-CD-006-002 Delivery:

- Finalized public interfaces with other subsystems



# Progress Since IDR-B (cont.)



**Completed Input to CDR-B DID 604-CD-002-003 and DID 605-CD-002-001 Deliveries:**

- **Finalized operational scenarios**

**Completed and Delivered CDR-B DAAC Specific Design Documents:**

- **DID 305-CD-31-002**
- **DID 305-CD-33-002**
- **DID 305-CD-34-002**
- **DID 305-CD-35-002**
- **DID 305-CD-36-002**
- **DID 305-CD-37-002**
- **DID 305-CD-38-002**
- **DID 305-CD-39-002**



# Progress Since IDR-B (cont.)

## ESDT-Related Progress:

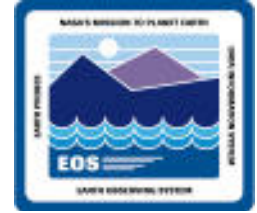
- Maintained 304-CD-005-002 Appendix F (Data Types Matrix) based on feedback from Instrument Teams
- Evaluated HDF-EOS Specification based on “B” requirements
- Validated Rel A ESDT architecture and life-cycle approach

## On-Demand Services Progress:

- Resolved On-Demand processing with PDPS by completing interfaces and protocol definition

## Subsetting Progress:

- Incorporated SSIG proceedings received 3/96 into technical concept of operations



# Progress Since IDR-B (cont.)

## Accounting Progress:

- Completed design via “shared” use of Data Distribution Utilization CSC (Uz) classes and methods

## ASTER DAR Progress:

- Completed definition of SDSRV role in ASTER DAR support (with Data Engineering) that uses existing class constructs

## Sybase to Illustra Migration Progress:

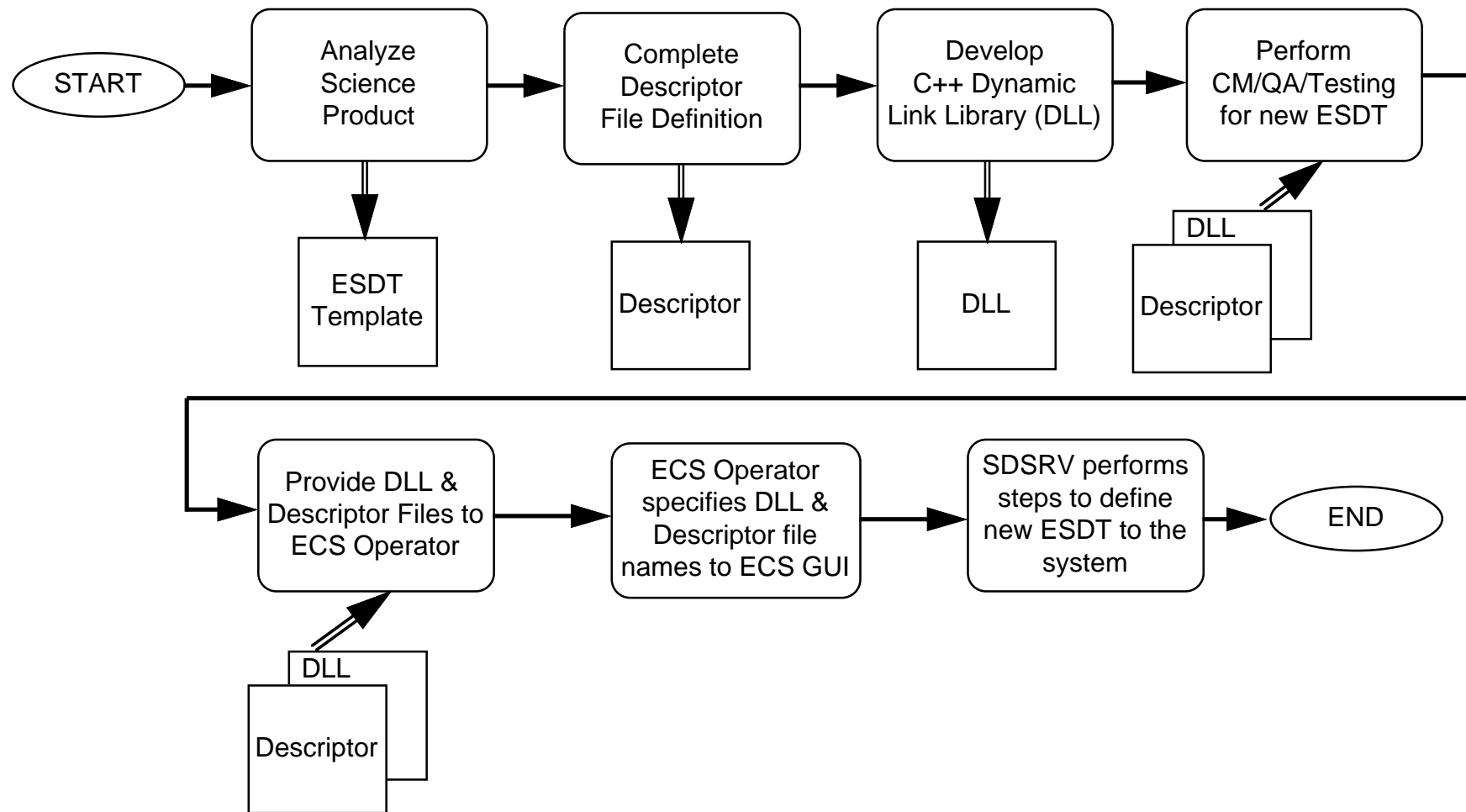
- Completed significant portion of Sybase/Illustra Benchmark
- Completed Illustra SOW and began work on Illustra Manageability SOW
- Completed Illustra trades - CDR-B

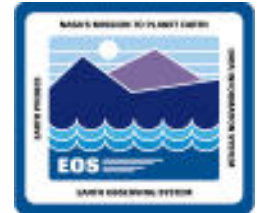
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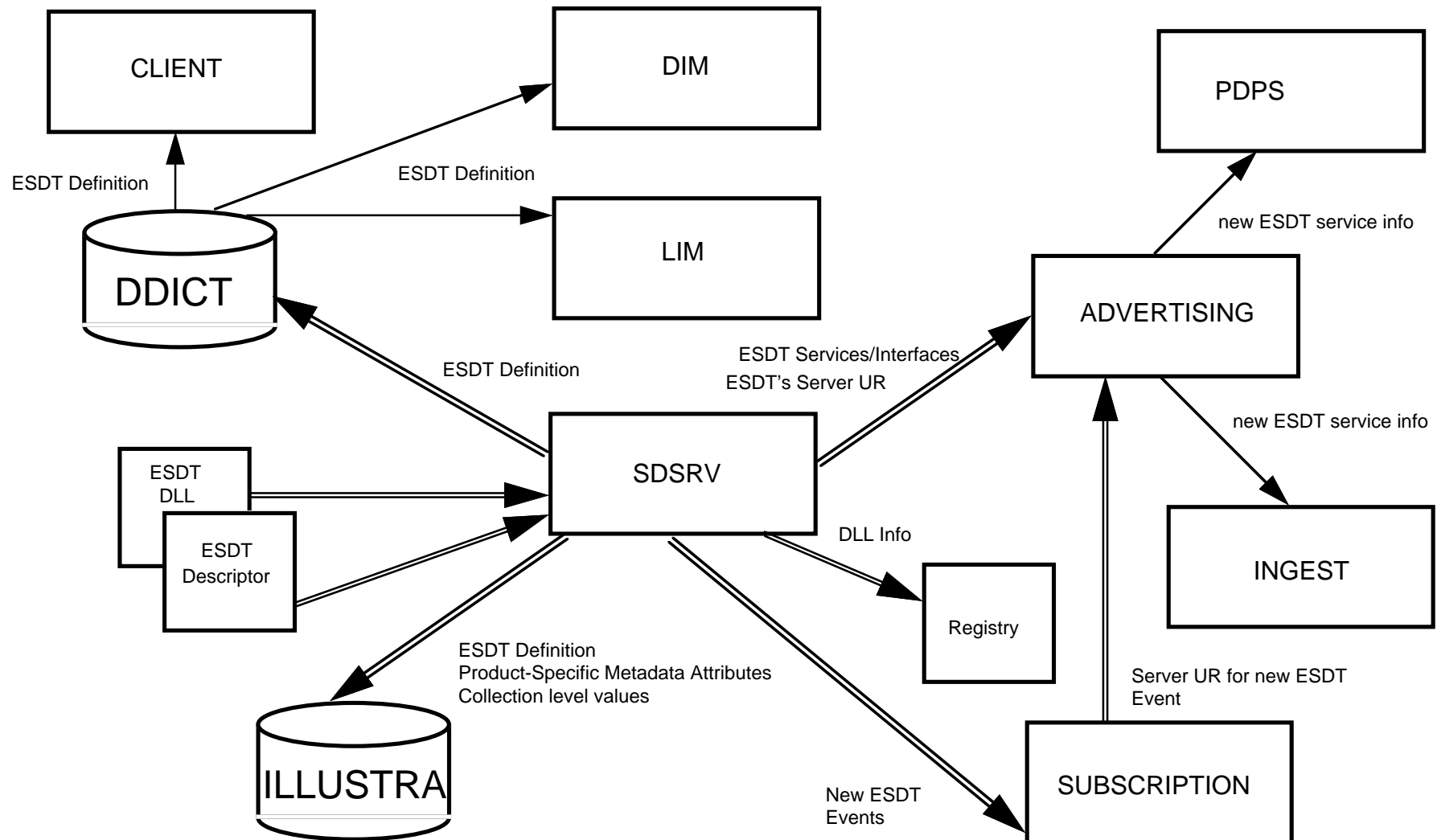
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# ESDT Lifecycle





# ESDT Architecture



# ESDT A->B Migration



**Rel A ESDTs/Services: 38, 108**

**Rel B ESDTs/Services: 173, 771**

## **ESDT “Architecture Impact” for Release B**

- **Release A provides architectural foundation for “generic” ESDT definition**
- **Release B brings new subsystem interface to Data Dictionary (DDICT)**
- **Schedule driven decision not to integrate Illustra features into ESDT definition**

# ESDT A->B Migration (cont.)



## ESDT Type Definition for Release B

- Effort required for “analysis” of new data types (Descriptor File Definition)
  - Data Types defined in Release A and B Matrix (See Handout #1)
  - Template developed for Release A provides process for performing analysis (See Handout #2)
- Effort required for code development of services for new data types (DLL)

## Evolutionary Enhancements (new features vs. new technology)

- Operational/Administration Tools